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## (54) DUST CORE AND ITS MANUFACTURE

(57)Abstract:

PURPOSE: To obtain high permeability without deteriorating soft magnetic characteristics, by using silicon resin as organic binder, and heat-treating compression molded object of mixture composed of the silicon resin and magnetic alloy powder, at a specified temperature, in a non-oxidizing atmosphere.

CONSTITUTION: Alloy powder whose main component is iron, silicon and aluminum is heat-treated at a temperature of 250-950°C, in an oxidizing atmosphere. Silicon resin is mixed in the heat-treated alloy powder, and

compression molding is performed. The compression molded object is heat-treated at a temperature of 500-1100°C, in a nonoxidizing atmosphere. Thereby dust core having high permeability and high insulative characteristics can be obtained.